

Anatomy & Physiology I

Self Quiz Ch 5

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1. All of the following are part of the integumentary system EXCEPT the
 - A) epidermis
 - B) dermis
 - C) subcutaneous layer
 - D) hair and nails
 - E) sebaceous and sweat glands

2. The epidermis
 - A) is the deepest layer of the cutaneous membrane.
 - B) is composed of stratified squamous epithelium.
 - C) has four or five layers of cells.
 - D) is highly vascular.
 - E) contains adipocytes and collagen fibers.

3. Keratinocytes are the predominant cells in the:
 - A) epidermis.
 - B) papillary region of the dermis.
 - C) reticular region of the dermis.
 - D) subcutaneous layer.
 - E) All of the above are correct.

4. Arrange the layers of the epidermis in order from most superficial to deepest.
 1. stratum spinosum
 2. stratum granulosum
 3. stratum corneum
 4. stratum basale
 5. stratum lucidum
 - A) 4, 1, 2, 5, 3
 - B) 3, 5, 1, 2, 4
 - C) 4, 1, 5, 3, 2
 - D) 3, 5, 2, 1, 4
 - E) 4, 3, 2, 5, 1

5. Which layer of the epidermis consists of 25-30 layers of dead, flattened keratinocytes?
 - A) stratum corneum.
 - B) stratum lucidum.

- C) stratum granulosum.
- D) stratum spinosum.
- E) stratum basale.

6. Which of the following is present in thick skin but not in thin skin?

- A) stratum germinativum
- B) stratum lucidum
- C) stratum corneum
- D) stratum granulosum
- E) dermal papillae

7. The average length of time for a cell to be produced by the stratum basale, rise to the surface, become keratinized, and slough off is about how long?

- A) 24 to 48 hours
- B) two weeks
- C) one month
- D) one year
- E) Once cells are keratinized, they never slough off.

8. Psoriasis

- A) is a rare skin cancer.
- B) occurs when keratinocytes reproduce too quickly.
- C) forms irregular, black tarry scabs on the skin.
- D) usually occurs on the shoulders, hips and ankles.
- E) is treated by stimulating cell division.

9. The reticular region of the dermis

- A) is called the reticular region.
- B) consists of primarily of adipose tissue.
- C) contains collagen fibers and elastic fibers.
- D) A and B are correct.
- E) A and C are correct.

10. Fingerprints

- A) appear during the 3rd and 4th week of fetal development.
- B) are formed as the dermis conforms to the underlying subcutaneous layer.
- C) are unique to each individual and maintain a constant pattern throughout life.
- D) decrease friction between the skin and smooth surfaces.
- E) are studied by a field of science called dermatology.

11. An individual born without the ability to make the enzyme tyrosinase has which of the following conditions?

- A) vitiligo
- B) albinism
- C) jaundice
- D) cyanosis
- E) erythema

12. Tattooing

- A) is the coloring the skin by applying natural dyes to the epidermis.
- B) inserts ink particles into the dermis.
- C) inserts ink particles into the subcutaneous region.
- D) can only be removed by cutting away the tattooed skin.
- E) can be removed by repetitive washing with soap and water.

13. Body piercing

- A) is the insertion of jewelry through an artificial opening.
- B) may take up to a year for complete healing to occur.
- C) may result in cartilage deformation or nerve damage.
- D) may interfere with medical procedures.
- E) All of the above are correct.

14. Which of the following is NOT considered an accessory structure of the skin?

- A) hair
- B) sweat glands
- C) sebaceous glands
- D) nails
- E) Merkel's disc

15. Which of the following is true of hair growth?

- A) Scalp hair grows for 2 to 6 months before resting for 3 years.
- B) At any given time, 85% of the scalp hairs are resting.
- C) Normal hair loss in the adult is around 100 hairs a day.
- D) Hair growth and replacement cycles are unaffected by stress and diet.
- E) Hair shafts contain living cells.

16. Sebum

- A) is a watery secretion used to cool the body.
- B) is a waxy substance produced by glands in the ear canal.

- C) is produced by sebaceous glands that are, in most cases, attached to hair follicles.
- D) contains primarily carbohydrates and salts.
- E) promotes evaporation of water from the skin.

17. Acne

- A) is an inflammation of sebaceous glands.
- B) is caused by viruses attacking the cells of the sebaceous glands.
- C) is more commonly associated with the elderly.
- D) is usually found in sebaceous glands inhibited by androgen hormones.
- E) is never associated with permanent scarring of the epidermis.

18. Ceruminous glands

- A) produce ear wax.
- B) produce milk.
- C) produce sweat.
- D) produce sebum.
- E) produce ear wax and sebum.

19. Which of the following is NOT a function of the skin?

- A) regulates body temperature
- B) participates in synthesis of vitamin A
- C) serves as the first and foremost barrier to disease
- D) excretes some waste products
- E) house sensory receptors

20. How does skin contribute to regulation of body temperature?

- A) releasing perspiration, which evaporates and carries away heat
- B) altering blood flow to the dermis, which adjusts how much heat will radiate from the body
- C) shivering, which produces heat
- D) A and B are correct.
- E) A, B, and C are correct.